Waiapu Catchment Technical Advisory Group

Hui 3 – Report 2: Managing Water Quantity in Ngā Wai o Waiapu

Questions for the Hui

- ***What are appropriate cultural purposes for any cultural water allocation in the Waiapu catchment?***
- ***Are there specific taonga species we should be setting minimum flows in rivers for?***
- ***Are there particular uses of water that should be given priority from the Waiapu Aquifer?***

1.0 Introduction

This paper introduces the issues in relation to the management of water takes within the Waiapu catchment area. It outlines the regional approach to managing water takes and seeks feedback from the roopu on cultural purposes for water, taonga species to provide for when setting minimum flows for rivers, and priorities for use of water from the Waiapu Aquifer.

1.1 Background and Context

There are two main approaches to water takes within the TRMP – activities which are Permitted without resource consent (Permitted Takes) and those which require resource consent. Within Ngā Wai o Waiapu, most water use falls within the Permitted Take category (e.g. stockwater, whanau drinking water takes). Currently, there are a few resource consents to take water from rivers and groundwater.

1.2 Proposed regional approach to improve management of water takes

Policies and rules for water takes have been reviewed as part of the overall review of the region-wide plan provisions. Draft options for improvements have been developed and discussed at the Regional Freshwater Advisory Group (FWAG). These have not yet been discussed at the TRMP Committee.

Preferred options developed are:

- Reducing the default provisions (where the catchment plan does not set limits) so that allocation is no more than **20%** of the Mean Annual Low

Flow (MALF) in rivers with a mean flow of less than 5000 l/s. (Currently the default allocation limit is **30%** of MALF).

- Reducing the allocation limits for groundwater from coastal aquifers susceptible to saline intrusion to **15%** of annual average recharge (it is currently **30%**).
- Providing policy to guide water takes during high flows for storage.
- Setting out allocation priorities – elevating domestic drinking water above other uses.
- Restricting the maximum % of an allocation that can be granted to a single user.
- Encouraging a reciprocal approach to water takes – whereby the water user is required to demonstrate positive environmental outcomes.
- Recognising mana whenua rights and interests by providing for a % allocation of water for specified uses such as:
    - Supporting marae or papakāinga
    - Environmental enhancement
    - Development of Māori owned land
- Policy and consent regime that recognised and Support the development of community water supplies – including full water supply systems and community drinking water stations/public taps and water carrier services.

1.3 RMA constraints for water quantity

The RMA sets out a framework that the Council and TRONPNui are required to work within for managing water takes. Key elements of this framework are:

- A "First in First Serve" approach – whoever applies first for the water is prioritised;
- A "Right of Renewal" – when a resource consent for a water take expires, the consent holder can renew their consent and has priority over new users;
- A requirement that any water allocation framework can provide for specific purposes, but not for specific people or entities.

2.0 Mana Whenua Allocation

At a regional level, staff propose that provisions be made for mana whenua rights and interests in water allocation.

To provide certainty around a lawful approach, the Council has obtained legal advice which confirms:

- Providing for an allocation of freshwater for mana whenua use may be legally valid but will depend on the details of the proposal.
- The purpose of the allocation must be clear and needs to consider how it fits with Te Mana o te Wai. Some parts of the proposed cultural use of water could fit within obligation 1 or 2 of the Te Mana o te Wai hierarchy.
- Rules cannot allocate water to particular applicants or individuals.
- There should be objectives and policies to support the allocation, preferably included within the Regional Policy Statement.

2.1 Options for providing for Māori Rights and Interests in water allocation

Three options have been developed to provide for Māori rights and interests as set out in the table below. At the moment, staff recommend **Option 1 – Percentage of allocation for use by mana whenua**, and that the same approach is taken across Tairāwhiti. Consultation with iwi around this issue is still being undertaken, and Council may end up adopting a different option.

Table 1 – Options to provide for Māori Rights and Interests: Water Allocation	
Option 1: Percentage of allocation for use by mana whenua	• This option would set a percentage of any take limit that is then made available for mana whenua use. • Northland Regional Council has proposed a 20% default allocation. There is precedence for this with the Fisheries Quota Management System. • The percentage could be different in parts of the region, or apply equally for all water quantity zones. For example, in over-allocated zones such as the Makauri Aquifer, a reduced limit may be considered appropriate to reduce impacts on existing users. Alternatively, a larger limit could apply in catchments (such as the Waiapu) with higher proportions of Māori owned land.
Option 2: Allocation determined by mana whenua during catchment plan process in accordance with principles	• This approach would apply to any new take limits developed during the catchment planning process, or future limit setting processes. • This option leaves the quantity of the allocation to be determined through engagement with mana whenua. To assist in this process however, some principles or matters for consideration could be developed as direction on how to come to an allocation amount.
Option 3: Allocation based on developable Māori land	• This approach would require analysis of land that is yet to be developed and potential development options to determine an appropriate allocation. • This option may need to consider any water allocation held by mana whenua already.

2.2 Purposes for the use of water allocated for mana whenua use

Because any water allocation must be for a specific purpose, the TRMP will need to spell out what the purposes of any mana whenua allocation might be.

Examples of the types of activities that are provided for with mana whenua allocation in other parts of the country are:

- Contribution to environmental enhancement;
- Wai for domestic use by marae and papakāinga;
- The development of Māori owned land and land returned to a Post-Settlement Governance Entity through a Treaty Settlement; and
- Enhancement of mahinga kai values.

Feedback is sought from the Advisory Group about the appropriate uses of a mana whenua allocation.

3.0 Setting Minimum Flows in Rivers – Taonga Species

The TRMP anticipates that Minimum Flows and Take Limits on main rivers will be set in catchment plans. For the Ngā Wai o Waiapu Catchment Plan, that would mean setting minimum flows for the Waiapu, Mata and Tapuaeroa rivers. The minimum flow is the flow rate in a river used as a trigger to suspend most water abstraction (some uses may continue on a restricted basis).

The normal method to set minimum flows for rivers is to base this on ensuring a level of habitat availability for the key fish species found in the river. Fish needs are a key element in determining instream flow levels because fish are considered an "indicator species" – if the fish are doing well, then generally other instream species are too.

Across Tairāwhiti, as a default, female adult long fin eels are being used as the key indicator species for setting minimum flows. A key question is what proportion of habitat we should be providing for them. For example in the Waipaoa River, current minimum flows provide for 75% of the habitat for large female long fin eels and 52% of the habitat for juvenile long fin eels, although it is recognised that this is likely to need to increase. As a comparison, in the Mōtū River it is proposed in the draft Catchment Plan that the minimum flows provide for 100% of the available habitat for female long fin eels.

While adult long fin eels are an important taonga for all iwi and hapū across the region, there may be other species that are equally important to consider when setting minimum flows in ngā wai o Waiapu. Examples of other fish species that are used in other parts of the country are kaoro, torrent fish, bullies, smelt and trout.

Council river flow data for the Waiapu River and tributaries, and information about the relationship between flow levels and fish habitat for the Waiapu and Mata rivers are included in the appendices.

Feedback is sought from the roopu about whether there are important or taonga species that should be considered when setting flow limits in ngā wai o Waiapu.

4.0 Water Use from the Waiapu Aquifer

When developing the current Freshwater Plan 2015, it was thought that the Waiapu Catchment was the location of a large, multiple aquifer groundwater system. This was based on a desktop geological survey and analysis of the information from the small number of bores drilled into the Waiapu aquifer system.

Since that time, further investigations into the Groundwater system by GNS and Council in the Waiapu groundwater systems have been undertaken through bore drilling and SkyTem mapping studies. Final reports on these studies are due at the end of 2025. However, the preliminary results indicate that there is no large groundwater resource in the catchment, contrary to the estimates from previous desktop studies. The results also indicate that the small groundwater system is closely connected to the Waiapu River, and that abstractions of groundwater could impact on river flows. The aquifer also may partly underlie the coastal area, meaning that saltwater intrusion must be avoided. The latest update on this research is attached at Appendix 3.

The current studies are intended to provide guidance on volumes of water that can be safely extracted without adversely impacting on river values, or causing salt water intrusion in the groundwater.

Given that much less groundwater quantity is available than previously thought, there may be value in the Ngā Wai o Waiapu Catchment Plan identifying priorities for the water in the aquifer.

The groundwater quality, while not pristine, is much better than most rivers in the Catchment. Therefore, the aquifer is likely to be the most suitable source of any community drinking water supply for the Ruatorea or Tikitiki communities. If the water is already allocated for other uses, the water allocation system could prevent a drinking water supply from being established. Setting priorities for use of this water in the Catchment Plan may be appropriate.

5.0 Summary

This paper introduces the issues around water quantity in the catchment. Feedback from the group is sought around how the Ngā Wai o Waiapu Catchment Plan should:

- Identify any specific purposes for a mana whenua allocation
- Identify additional taonga species and ensure that river minimum flows provide a good level of habitat for these species;
- Prioritise any uses for water from the Waiapu Aquifer.

Appendices

Appendix 1: River Flow Data for the Waiapu River and Tributaries
Appendix 2: Relationship Between Flows & Fish Habitat from Waiapu Flow Studies
Appendix 3: Aerial Aquifer Mapping – East Coast update (Waiapu) June 2025

Appendix 1: River Flow Data for the Waiapu River and Tributaries

Waiapu River at Rotokautuku Bridge

Continuous flow data has been collected at the Rotokautuku Bridge since 1975. The flow summary statistics for the period 1975-2013 for that site are shown below.

Mean	Median	7Day MALF	Upper Quartile	Lower Quartile	95%
97m³/s	38.8m³/s	6.398m³/s	98.4m³/s	16.7m³/s	370 m³/s

Mata River

Continuous flow data has been collected in the Mata River at the Pouturu water-level recorders since 1989.

The flow summary statistics for the period 1989-2012 for that site and estimated flows at the Tapuaeroa River confluence are shown below.

Site	Mean	Median	7Day MALF	Upper Quartile	Lower Quartile
Mata River at Pouturu	25.1m³/s	3.53m³/s	0.398 m³/s	9.795 m³/s	0.808m³/s
Mata River at Tapuaeroa Confluence	76.6 m³/s	29.4 m³/s	4.85 m³/s	74.5 m³/s	12.7 m³/s

Tapuaeroa River

There is no flow monitoring on the Tapuaeroa River, however if the Mata River flows are removed from the Waiapu River flows, an estimate can be obtained as follows:

Mean	Median	7Day MALF
20.4m³/s	9.4 m³/s	1.548 m³/s

Maraehara River

Flow data from NIWA NZ River Maps National Estimate:

Mean	Median	MALF
1.63 m³/s	0.726 m³/s	0.215 m³/s

Poroporo River

Flow data from NIWA NZ River Maps National Estimate:

Mean	Median	MALF
1.52 m³/s	0.754 m³/s	0.24 m³/s

Mangaoporo River

Flow data from NIWA NZ River Maps National Estimate:

Mean	Median	MALF
2.19 m³/s	1.12 m³/s	0.369 m³/s

Appendix 2: Relationship Between Flows and Fish Habitat from Waiapu Flow Studies

A study was done by NIWA into optimum flows for different fish species in the Mata and Waiapu Rivers (*Duncan and Sykes, 2015. Instream habitat and minimum flow and allocation requirements in the Waiapu River and Duncan and Sykes, 2015. Instream habitat and minimum flow and allocation requirements in the Mata River*)

Optimum habitat available at different flows was modelled and identified as follows:

Species	**Mata Optimum Flow (summer minimum is 4.85m³/s)**	**Waiapu Optimum Flow (summer minimum is 6.4m³/s)**
Common bully	7 m³/s	3-4 m³/s (but good for almost all except the lowest flows)
Inanga feeding	20 m³/s	1 m³/s
Torrentfish	9-12 m³/s	12-15 m³/s
Koaro	4-7 m³/s	8-10 m³/s
Smelt	14-17 m³/s	4-6 m³/s
Large longfin eel/tuna	17-20 m³/s	9-10 m³/s
Small longfin eel/tuna	6 m³/s	7 m³/s
Large shortfin eel	14-18 m³/s	5-7 m³/s
Small shortfin eel	5-6 m³/s	4-8 m³/s
Fingerling Rainbow trout	3 m³/s	3-6 m³/s
Rainbow Trout adult	20 m³/s	30 m³/s

The table above shows that for species such as large longfin eel and torrentfish, much higher flows provide the best habitat, whereas for other species it is much more variable across the two rivers, reflecting the different habitats that are available.